

## Recent ornithological literature from the Caribbean: 2024

An annual feature of the *Journal of Caribbean Ornithology*, this annotated guide alerts readers to recent ornithological literature from the Caribbean basin that has appeared elsewhere. Most of these articles appeared in 2024, although a few that were previously missed are also summarized below. We would also like to include any unpublished theses or other reports that may be difficult to find in more universally available abstract services. We invite readers of the *Journal of Caribbean Ornithology* to alert our compiler, Steven Latta, to other articles that should be highlighted in this section. Our hope is that by providing these summaries we will increase the exchange of knowledge among Caribbean ornithologists and conservationists.

—Steven C. Latta

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Boal, C.W., and B.D. Bibles. 2024. Weather events influence survival and recruitment of *Coereba flaveola* (Bananaquit) in the Caribbean. *Ornithology* [ukae052](#).—A 10-yr capture–mark–recapture data set was used to examine Bananaquit survival, recruitment, population growth, and age structure in context of monthly and seasonal precipitation and temperatures, drought conditions, and occurrence and intensity of storm events. Models suggested wing length, occurrence of storms, and drought all influenced survival. During non-storm years, mean population growth was stable at 1.019 (95% CI: 0.962, 1.098), but dropped to 0.843 (95% CI: 0.795, 0.846) in storm years. Increasing frequency of storms, such as back-to-back years, would likely push the growth rate lower. A protracted pattern of increased storm frequency, especially if coupled with a subsequent drought during the wet season, may lead to localized extirpations or strongly reduced populations. E-mail: [clint.boal@ttu.edu](mailto:clint.boal@ttu.edu).

Briceño-Linares, J.M., J. Aranguren-Alvarez, J. Clarendia, A. Díaz, O. Doest, J. Haines, E. Houtepen, R.O. Martin, P.A. Millán, G. Nunez, L. Schmaltz, B. Sucre, F. van Slobbe, and J.P. Rodríguez. 2024. Research, management, and conservation of the Yellow-shouldered Amazon (*Amazona barbadensis*) across its range in the southern Caribbean and mainland Venezuela: 1980s to the present. *Frontiers in Conservation Science* [5:1444609](#).—The Yellow-shouldered Amazon has been the object of a decentralized research and conservation program throughout its range, spanning mainland Venezuela, the Venezuelan islands of La Blanquilla and Margarita, and Aruba, Curaçao, and Bonaire in the southern Caribbean. E-mail: [jonpaul.rodriguez@gmail.com](mailto:jonpaul.rodriguez@gmail.com).

Bush, S.E., M.M. Waller, K.M. Davis, S.F. Clayton, and D.H. Clayton. 2024. Birds in arid regions have depauperate louse communities: climate change implications? *Ecology and Evolution*

[14:e70280](#).—The diversity of parasitic lice (Insecta: Phthiraptera) on birds is investigated in arid Utah and humid Bahamas. Data suggest that as climates change, birds in arid regions will have less diverse louse communities over time, potentially relieving birds of some of the cost of controlling these ectoparasites. Conversely, birds in more humid regions will see an increase in louse diversity, which may require them to invest more time and energy in anti-parasite defense. E-mail: [bush@biology.utah.edu](mailto:bush@biology.utah.edu).

Byerly, P.A., A.M. Kearns, A. Welch, M.-E. Ochirbat, P.P. Marra, A. Wilson, M.G. Campana, and R.C. Fleischer. 2024. Museum genomics provide insight into the extinction of a specialist North American warbler species. *Scientific Reports* [14:17047](#).—Mitochondrial DNA and genome-wide SNPs of the Bachman's Warbler (*Vermivora bachmanii*) were analyzed to investigate population demographics of this extinct species. No signals of strong population structuring were found across the breeding range. Thus, long-term population isolation did not appear to be a significant contributor to the extinction of the species. Instead, findings support the theory that Bachman's Warblers underwent a rapid decline driven by habitat destruction, which may have been exacerbated by the natural rarity, habitat specificity, and low genetic diversity of the species. E-mail: [byerlyp@si.edu](mailto:byerlyp@si.edu).

Cambrone, C., A. Levesque, and F. Cézilly. 2024. Using citizen science and field surveys to document the introduction, establishment, and rapid spread of the Bare-Eyed Pigeon, *Patagioenas corensis*, on the island of Saint-Martin, West Indies. *Biology* [13:585](#).—E-mail: [christopher.cambrone@caribaea.org](mailto:christopher.cambrone@caribaea.org).

Carlo, T.A., J.V.S. Messeder, W.D. Espíndola, B.S. Vizzachero, B.W. Boyer, J. Hernández-Mejía, E.A. Torres-Páucar, A. Fontanella, M.A. Pizo, G. Amico, L. Salinas, C. Arana, T. Morán-López, and J.M. Morales. 2024. Negative density dependence characterizes mutualistic interactions between birds and fruiting plants across latitudes. *Philosophical Transactions of the Royal Society B* [379:20230128](#).—Negative density dependence (NDD) was investigated by sampling community-wide frugivory interactions at high spatial and temporal resolution in Puerto Rico and four other sites. Interaction frequencies between birds and fruit resources were evaluated based on whether they occurred more often (selection), as expected, or below expectations (under-utilization) set by the relative fruit abundance of the fruit resources of each plant species. Irrespective of taxa or dietary guild, birds tended to select fruits of plant species that were proportionally rare in their communities, or that became rare following phenological fluctuations, while they mostly under-utilized abundant fruit resources. Results demonstrate negative density-dependence in frugivore–plant interactions, likely contributing to building and sustaining plant diversity. E-mail: [tac17@psu.edu](mailto:tac17@psu.edu).

Cooper, N.W., S.W. Yanco, C.S. Rushing, T.S. Sillett, and P.P. Marra. 2024. Non-breeding conditions induce carry-over effects

on survival of migratory birds. *Current Biology* 34:5097–5103.—New methods are used to estimate apparent survival during migration directly from automated telemetry data in Kirtland's Warblers (*Setophaga kirtlandii*) and indirectly from mark-recapture data in Black-throated Blue Warblers (*S. caerulea*). Reduced precipitation and environmental productivity in the non-breeding period were found to strongly influence survival in both species, primarily by reducing survival during spring migration. Results indicate that climate-driven environmental conditions can carry over to affect survival in subsequent periods and thus likely play an important role in year-round population dynamics. E-mail: [coopern@si.edu](mailto:coopern@si.edu).

Cummings, W., D.D. Goodman, C.D. Layne, K.I. Singer, and M.W. Thomas. 2024. Characteristics of Vitelline Warbler songs and calls. *bioRxiv*, 2024-10:617988.—E-mail: [Wyatt.Joseph.Cummings@dartmouth.edu](mailto:Wyatt.Joseph.Cummings@dartmouth.edu).

De Ruyck, C.C., and N. Koper. 2024. Diets of small-island tropical birds suggest generalist/opportunistic foraging niches and the conservation value of diverse agroecosystems. *Wilson Journal of Ornithology* 136:179–195.—Fecal samples from 356 individuals of 14 bird species, including 3 Lesser Antilles endemics, were obtained from various agroforests, pasture, and cropping habitats on the island of Grenada. Diet items were determined using DNA meta-barcoding analysis. A wide mix of arthropod and plant genera were found across an annual cycle in every bird species studied. This study reveals the various roles that these generalist species play in agroforest habitats (e.g., crop plant pest control, pollination, seed dispersal), and the results can be used to further explore land use practices that best provide food resources to support this unique island bird community and the ecosystem functions they carry out. E-mail: [ccdr\\_sc@hotmail.com](mailto:ccdr_sc@hotmail.com).

De Ruyck, C.C., and N. Koper. 2024. Seasonal movements of small-island birds along habitat and elevation gradients highlights the conservation value of small-scale agroforests. *Agriculture, Ecosystems and Environment* 375:109195.—Bird surveys (3 wet season, 3 dry season) were used to examine species distributions across a range of agricultural land use intensities and elevations on the island of Grenada. Sites were located in a variety of habitats spread over 6–300 m elevation. E-mail: [ccdr\\_sc@hotmail.com](mailto:ccdr_sc@hotmail.com).

Exantus, J.M., E. Bezault, C. Cambrone, and F. Cézilly. 2024. Estimation of adult sex ratio and size-related sexual dimorphism based on molecular sex determination in the vulnerable La Selle Thrush, *Turdus swalesi*. *Animals* 14:842.—A slight, albeit significant, sexual dimorphism in size was observed, with males having, on average, both a longer wing chord and a longer tail than females. Tail length was the best predictor of sex in a logistic regression model, with ~80% of individuals being correctly assigned to their actual sex. Overall adult sex ratio was significantly male-biased during the non-breeding season, suggesting that males may show more site tenacity than females. E-mail: [jeanmary.exantus@yahoo.fr](mailto:jeanmary.exantus@yahoo.fr).

Fernández, E., M. Paulino, and L.R. Paulino. 2024. Dos nuevos lugares de anidación para el flamenco del Caribe, *Phoenicopiterus ruber* (Phoenicopiteriformes: Phoenicopiteridae), en el noroeste de República Dominicana. [Two new breeding sites for the flamingo of the Caribbean, *Phoenicopiterus ruber* (Phoenicopiteriformes: Phoenicopiteridae), in northeastern Dominican

Republic]. *Novitates Caribaea* 24:95–101.—E-mail: [eladio\\_809@hotmail.com](mailto:eladio_809@hotmail.com).

Fleming, G.M., J.M. Wunderle, Jr., J.D. White, D. Currie, E.H. Helmer, and D.N. Ewert. 2024. Winter dry season reproductive phenology in Bahamian dry forest and implications for conservation. *Biotropica* 56:170–184.—Understanding the patterns of and controls on plant reproduction are crucial for avian conservation efforts under a changing global climate and rapidly expanding human development. However, phenology studies from the Neotropics are sparse. Here, the relative timing and magnitude of fleshy-fruited plant reproduction during the winter dry season are examined in subtropical dry forest on Eleuthera, The Bahamas over a nine-year period, with results related to local bird populations. E-mail: [fleming.gm@gmail.com](mailto:fleming.gm@gmail.com).

Folfas, E., D.L. Mahler, and L.O. Frishkoff. 2024. Climate, predation, and the controls of island lizard abundance and community structure. *Ecosphere* 15:e70053.—Using data from eBird, landscape-level presence of bird species was inferred on the islands of Jamaica and Hispaniola. By summing occurrence probabilities of all known anole-predating birds, total avian predation pressure was estimated, and these results were combined with estimates of anole communities from a mark-recapture study that spanned spatial and climatic gradients on both islands. Findings support past research showing that islands with more predators tend to have lower prey abundances, but it does not seem that these top-down forces are strongly limiting species coexistence. Instead, bottom-up forces linked with climate may be more important drivers of diversity in both lizards and their avian predators on these islands. E-mail: [edita.folfas@uta.edu](mailto:edita.folfas@uta.edu).

Frixione, M.G., S.E. Bush, and D.H. Clayton. 2024. High ectoparasite loads of tropical birds: chewing lice on Puerto Rican American Kestrels (*Falco sparverius caribaeorum*). *Journal of Wildlife Diseases*.—E-mail: [mfpatagonia@gmail.com](mailto:mfpatagonia@gmail.com).

García-Quintas, A., C. Barbraud, P. Bustamante, A. Lorrain, D. Denis, and S. Lanco. 2024. Annual plasticity of the trophic niche of the Bridled Tern *Onychoprion anaethetus* in Cuba. *Ardeola* 71:277–290.—E-mail: [agquintas86@gmail.com](mailto:agquintas86@gmail.com).

Gouraud, C., and J.F.J. Jansen. 2024. Extinct and endangered ('E&E') birds in the ornithological collection of Le Belfroi Musée Boucher de Perthes-Manessier, Abbeville, France. *Bulletin of the British Ornithologists' Club* 144:244–268.—Species include Martinique Oriole (*Icterus bonana*), Ivory-billed Woodpecker (*Campephilus principalis*), St. Lucia Parrot (*Amazona versicolor*), and Martinique Thrasher (*Ramphocinclus brachyurus*).—E-mail: unavailable.

Gutiérrez-Ramos, N.A., and M.A. Acevedo. 2024. Higher body condition with infection by *Haemoproteus* parasites in Bananaquits (*Coereba flaveola*). *PeerJ* 12:e16361.—The consequences of *Haemoproteus* infection on the Bananaquit was tested among birds in Puerto Rico. Three complementary body condition indices were compared between infected and uninfected individuals. Results showed that Bananaquits infected by *Haemoproteus* had higher body condition than uninfected individuals. There was no clear evidence that this effect was mediated by host age or sex. A set of non-mutually exclusive hypotheses may explain this pattern including metabolic syndrome, immunological responses leading to host tolerance or resistance to infection, and potential changes in consumption rates. E-mail: [nicole.gutierrez1@upr.edu](mailto:nicole.gutierrez1@upr.edu).

Guzmán Pérez, R., 2023. Comunidad de aves y patrones de frugivoría en *Stenocereus heptagonus* (L.) Mottram en el bosque seco tropical del Parque Nacional Jaragua. [The community of birds and patterns of frugivory of *Stenocereus heptagonus* (L.) Mottram in the tropical dry forest of Jaragua National Park]. M.S. Thesis, Centro Agronómico Tropical de Investigación y Enseñanza (CATIE), Turrialba, Costa Rica. [repositorio.catie.ac.cr/handle/11554/12620](https://repositorio.catie.ac.cr/handle/11554/12620).—Point counts and camera traps were used to characterize the bird community and identify birds consuming fruit of the *Stenocereus heptagonus* cactus. Seven species of birds were seen to eat or perch on the cactus. E-mail: unavailable

Hernández-Borroto, S., and S. Hernández-Valencia. 2024. Primeros reportes del ruiseñor *Myadestes elisabeth* (Passeriformes: Turdidae) en la provincia de la Habana, Cuba [First reports of the Cuban Solitaire *Myadestes elisabeth* (Passeriformes: Turdidae) in the Province of La Habana, Cuba]. *Novitates Caribaea* 24:90–94.—E-mail: [hernandezborroto.s@gmail.com](mailto:hernandezborroto.s@gmail.com).

Kemp, M.E. 2024. Assembly, persistence, and disassembly dynamics of Quaternary Caribbean frugivore communities. *American Naturalist* 204:400–415.—Paleontological and neontological data were used to reconstruct Caribbean frugivore communities over the Quaternary (2.58 million years ago to present). Numerous Caribbean frugivore lineages arise during periods coincident with the global origins of plant-frugivore mutualisms. The persistence of many of these lineages into the Quaternary is indicative of long-term community stability, but an analysis of Quaternary extinctions reveals a nonrandom loss of large-bodied frugivores. Anthropogenic impacts underlie the recent reorganization of frugivore communities, setting the stage for continued declines and evolutionary responses in plants that have lost mutualistic partners. E-mail: [mkemp@Austin.utexas.edu](mailto:m Kemp@Austin.utexas.edu).

Mejías, M.A., and D.R. Wilson. 2023. Breeding biology and nesting behavior of the endemic subspecies of White-eyed Vireo (*Vireo griseus bermudianus*) on the Bermuda archipelago. *Journal of Field Ornithology* 94:1.—Between 2016 and 2021, 84 nests were located. Breeding data were collected associated with 47 breeding pairs, and observations were conducted throughout the nesting cycle. E-mail: [miguelmejias.birds@gmail.com](mailto:miguelmejias.birds@gmail.com).

Montes, R., J. Belliure, and R.J. Chamizo. 2024. Nest site reuse by the White-collared Swift *Streptoprocne zonaris* in rocky caves in south-central Cuba. *Acta Ornithologica* 58:145–152.—E-mail: [montesninin@gmail.com](mailto:montesninin@gmail.com).

Muccio, K.R., E.E. Crone, and J.M. Reed. 2024. A model of coffee berry borer population growth and susceptibility to control by birds. *Population Ecology* 66:263–273.—Previous field experiments show that birds play a role in suppressing coffee berry borer (CBB) (*Hypothenemus hampei*) infestations through predation, but the degree to which birds can suppress population growth enough to control infestations is unknown. The goal here was to assess the plausibility of CBB suppression by birds as a function of avian energy requirements, reported avian densities on coffee farms, prey composition of avian diets, estimated caloric value of CBB, and the initial starting population size. A model built on a daily time-step, deterministic Leslie matrix showed CBB population growth became exponential ( $\lambda_{\text{daily}} = 1.042$ ) and that at low, but not medium or high, population sizes, were birds able to reduce population growth by 50%.

In general, birds exert predation pressure on insect populations, but the ability to control infestations is complex, and is likely dependent on the initial CBB population size. E-mail: [kmuccio1@gmail.com](mailto:kmuccio1@gmail.com).

Pietsch, T.W., and B. Marx. 2024. Charles Plumier's descriptions and drawings of Antillean birds (1687–1697). 2024. *Archives of Natural History* 51:121–138.—French friar Charles Plumier (1646–1704) produced an enormous body of iconographic material during three expeditions to the West Indies between 1687 and 1697. Birds are represented by 215 drawings, including whole specimens but also numerous detailed views of anatomy, osteological as well as internal soft parts. The bird drawings are here identified, described, and fully catalogued for the first time, and selected drawings are reproduced. Evidence is presented to emphasize the originality and scientific accuracy of Plumier's accounts. E-mail: [twp@uw.edu](mailto:twp@uw.edu).

Rhyne, G.S., P.C. Stouffer, M. Briedis, and R. Nussbaumer. 2024. Barometric geolocators can reveal unprecedented details about the migratory ecology of small birds. *Ornithology* 141:ukae010.—The strengths and limitations of barometric pressure geolocators (pressure tags) are examined and shown to be extremely effective in tracking small birds (< 25 g). An example of a pressure tag on a Swainson's Warbler (*Limnothlypis swainsonii*) is provided. Deployed on its breeding territory in Virginia, USA, the complete migration to and from Cuba is revealed, including its refined wintering site, stopover sites, and migration routes, all with precise timing. E-mail: [grhyne@abcbirds.org](mailto:grhyne@abcbirds.org).

Rodríguez-Ochoa, A., J.W. Kusack, L. Mugica, M.A. Cruz, P. Alfonso, B. Delgado-Hernández, Y. Abreu, E. García, and K.A. Hobson. 2024. Migratory connectivity of Blue-winged Teal: risk implications for avian influenza virus introduction to Cuba. *Frontiers in Bird Science* 3:1401625.—The objective here was to determine migratory connectivity of Blue-winged Teal (*Spatula discors*) and evaluate the risk of avian influenza virus (AIV) introduction to Cuba by this species. The stable hydrogen isotope ( $\delta_2\text{H}$ ) value in flight feathers was analyzed. Individuals were sampled during the migratory season of 2021 ( $N = 126$ ) and winter residence of 2020 ( $N = 152$ ), in western and central Cuba, respectively. A map of likely origin in North America of the individuals sampled for each season was generated. The spatial-temporal pattern of AIV prevalence in the estimated region was analyzed and suggestions are made to assist the Cuban system of active AIV surveillance of wild birds. E-mail: [rdguezochoa89@gmail.com](mailto:rdguezochoa89@gmail.com).

Satgé, Y.G., S.E. Janssen, G. Clucas, E. Rupp, J.B. Patteson, and P.G. Jodice. 2024. Mesopelagic diet as pathway of high mercury levels in body feathers of the endangered Black-capped Petrel (Diablotin) *Pterodroma hasitata*. *Marine Ornithology* 52:261–274.—Mercury burden in feathers was measured, and DNA metabarcoding was used to compare diets. Higher concentrations of total mercury were recorded compared to other *Pterodroma* petrels worldwide. Diet was dominated by fish, including a high proportion of mesopelagic groups such as myctophids, as well as fishes of interest to artisanal and commercial Caribbean fisheries. These results confirm earlier suggestions of elevated ingestion of mercury by Black-capped Petrels, likely through the consumption of mesopelagic prey or fishery discards. E-mail: [ysatge@g.clemson.edu](mailto:ysatge@g.clemson.edu).

Timyan, J., A.-I. Bonifassi, and J.-M. Exantus. 2024. Censo

del flamenco americano *Phoenicopus ruber* (Phoenicopteriformes: Phoenicopteridae) en Haití. [Census of the American Flamingo *Phoenicopus ruber* (Phoenicopteriformes: Phoenicopteridae) in Haiti]. *Novitates Caribaea* 24:1–10.—timyan.hnt@gmail.com.

Turner, S. 2024. The role of prealternate moult in nonbreeding period carry-over effects in Neotropical migratory songbirds. M.S. Thesis, [Thompson Rivers University, British Columbia, Canada](#).—A detailed quantification of the timing, patterns, and intensity of prealternate moult is provided for six warbler species (Family: Parulidae) on their stationary nonbreeding grounds in Jamaica. The prealternate moult is common for Northern Waterthrush (*Parkesia noveboracensis*), Black-and-white Warbler (*Mniotilta varia*), American Redstart (*Setophaga ruticilla*), Northern Parula (*Setophaga americana*), and Prairie Warbler (*Setophaga discolor*), and for most species increases in frequency and intensity across the nonbreeding period. The prealternate moult also occurs in some Ovenbirds (*Seiurus aurocapilla*). The role of prealternate moult as a carry-over effect from the nonbreeding period is demonstrated in the American Redstart; this is the first potential evidence of a carry-over effect from prealternate moult to departure timing in a parulid warbler. E-mail: unavailable.

Vázquez-López, M., S.M. Ramírez-Barrera, A.K. Terrones-Ramírez, S.M. Robles-Bello, A.N. M. de Oca, K. Ruegg, and B.E. Hernández-Baños. 2024. Biogeographic factors contributing to

the diversification of Euphoniinae (Aves, Passeriformes, Fringillidae): a phylogenetic and ancestral areas analysis. *ZooKeys* 1188:169–195.—E-mail: [behb@ciencias.unam.mx](mailto:behb@ciencias.unam.mx).

Viñola-López, L.W., O. Jiménez-Vázquez, A. Hernández Muñoz, C.R. Borges-Sellén, A. Arano-Ruiz, and J. Paz Castro. 2024. Nuevos fósiles del Cuaternario colectados en depósitos cavernarios a alta elevación en Cuba. [New Quaternary fossils from high elevation cave deposits in Cuba]. *Novitates Caribaea* 24:69–78.—E-mail: [lwvl94@gmail.com](mailto:lwvl94@gmail.com).

Wunderle, J.M., Jr., M.E. Akresh, D. Currie, J.E. Mercado, E.H. Helmer, and D.N. Ewert. 2024. Factors influencing home range size and overlap in nonbreeding Kirtland's Warblers on Eleuthera, The Bahamas. *Avian Conservation and Ecology* 19:9.—Little is known about space use of the near-threatened Kirtland's Warbler (*Setophaga kirtlandii*) wintering in The Bahamas. Radio telemetry is used to determine sedentary home range size, core area, and overlap for 27 radio-tagged warblers during two winters on Eleuthera. Foliage of the warbler's principal fruit species (*Lantana involucrata*, *Erithalis fruticosa*, *Chiococca alba*) was present in more warbler core area plots than in outlier plots, or in random plots within the landscape. Findings re-emphasize the importance of conservation at a landscape scale if spatio-temporal variation in food resources increases or become more concentrated prior to migration with extreme weather due to global climate change. E-mail: [jmwunderle@gmail.com](mailto:jmwunderle@gmail.com).